

Docket No.: 59516-052

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Customer Number: 20277
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Zi-Kui LIU, et al.	:	Confirmation Number:
	:	
Serial No.:	:	Group Art Unit:
	:	
Filed: February 24, 2004	:	Examiner:
	:	
For: BORIDE THIN FILMS ON SILICON	:	

INFORMATION DISCLOSURE STATEMENT

Mail Stop IDS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

Serial No.:

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

A handwritten signature in cursive script, appearing to read "Daniel Bucca".

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)				ATTY. DOCKET NO. 59516-052		SERIAL NO.	
				APPLICANT Zi-Kui LIU, et al.			
				FILING DATE February 24, 2004		GROUP	
U.S. PATENT DOCUMENTS							
EXAMINER'S INITIALS	CITE NO.	Document Number Number-Kind Code2 (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US 6,514,557 B2	02/04/2003	Finnemore et al.			
		US 6,579,360 B2	06/17/2003	Balachandran et al.			
		US 5,032,571 A	07/16/1991	Takemura			
		US 3,949,119 A	04/06/1976	Shewchun et al.			
		US 3,791,852 A	02/12/1974	Bunshah			
		US 2002/0132739 A1	09/19/2002	Kang et al.			
		US 2002/0173428 A1	11/21/2002	Thieme et al.			
FOREIGN PATENT DOCUMENTS							
EXAMINER'S INITIALS	CITE NO.	Foreign Patent Document Country Code3 –Number 4 –Kind Code5 (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Figures Appear	Translation	
		WO 03/082482 A1	10/09/2003			Yes	No
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
		Rointan F. Bunshah et al., "DEPOSITION TECHNOLOGIES FOR FILMS AND COATINGS", Copyright 1982, pp.83, 122, 126, 127.					
		Xianghui ZENG, et al "In situ epitaxial MgB ₂ thin films for superconducting electronics". Nature Materials, vol. 1, September, 2002, pp. 1-3					
		John Rowell "Magnesium Diboride, Superior thin films", Nature Materials, vol. 1, September, 2002, pp. 5-6					
		Li-Kui LIU, et al., "Thermodynamics of the Mg-B system: Implications for the deposition of MgB ₂ thin films" Applied Physics Letters, Vol. 78, Number 23, June 4, 2001, pp. 3678-3680					
		Ron DAGANI, "Superior Superconducting Films of MgB ₂ ", C&EN: Today's Headlines, September 9, 2002, Volume 80, Number 36					
		Saito et al., "AS-GROWN MgB ₂ THIN FILMS DEPOSITED ON Al ₂ O ₃ SUBSTRATES WITH DIFFERENT CRYSTAL PLANES", Institute of Physics Publishing, pp. 1-6					
		Saito et al., AS GROWN MgB ₂ THIN FILMS DEPOSITED ON Al ₂ O ₃ SUBSTRATES WITH DIFFERENT CRYSTAL PLANE", 1 page					
		Saito et al., "AS-GROWN DEPOSITION OF SUPERCONDUCTING MgB ₂ THIN FILMS BY MULTIPLE-TARGET SPUTTERING SYSTEM", Reprinted from Jpn. J. Appl. Phys. Vol. 41 (2002) pp. L127-129					
		(Translation of Reference AP filed with the IDS dated September 9, 2002) – Shimakage et al., 'LOW TEMPERATURE FABRICATION OF AS-AS-GROWN MgB ₂ THIN FILMS BY CO-VAPOR DEPOSITION METHOD', Communications Research Laboratory Independent Administrative Institution, 2 pages.					
		LIU et al., "THERMODYNAMIC REACTIVITY OF THE MAGNESIUM VAPOR WITH SUBSTRATE MATERIALS DURING MgB ₂ DEPOSITION", 2003 Elsevier B.V. All rights reserved, doi:10.1016/j.physc.2003.07.006					
		T. He et al., "REACTIVITY OF MgB ₂ WITH COMMON SUBSTRATE AND ELECTRONIC MATERIALS", Applied Physics Letters, Vol 80, No. 2, January 14, 2002, pp. 291-293					
		Zi-Kui Liu et al., "COMPUTATIONAL THERMODYNAMIC MODELING OF THE Mg-B SYSTEM", Calphad, Vol. 25, No. 2, pp. 299-303					
EXAMINER				DATE CONSIDERED			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.